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**Search Results - Record(s) 1 through 2 of 2 returned.**

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1. Document ID: NZ 512208 A, WO 200032789 A1, AU 200015862 A, EP 1135507 A1, BR 9915881 A

**Using default format because multiple data bases are involved.**

L3: Entry 1 of 2

File: DWPI

Dec 19, 2003

DERWENT-ACC-NO: 2000-412335

DERWENT-WEEK: 200404

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TITLE: A new DNA sequence encoding a polypeptide with alcohol acyl transferase activity for producing and regulating aromatic and/or aliphatic ester formation in microorganisms, plant cells or plants

INVENTOR: AHARONI, A; LUECKER, J ; OCONNELL, A P ; VAN TUNEN, A J ; VERHOEVEN, H A ; O'CONNELL, A P ; LUCKER, J

PRIORITY-DATA: 1999EP-0200739 (March 12, 1999), 1998EP-0204018 (December 2, 1998)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>NZ 512208 A</u>	December 19, 2003		000	C12N015/53
<u>WO 200032789 A1</u>	June 8, 2000	E	163	C12N015/53
<u>AU 200015862 A</u>	June 19, 2000		000	
<u>EP 1135507 A1</u>	September 26, 2001	E	000	C12N015/53
<u>BR 9915881 A</u>	February 5, 2002		000	C12N015/53

INT-CL (IPC): A01 H 5/00; C07 K 16/40; C12 N 9/04; C12 N 9/10; C12 N 9/18; C12 N 9/88; C12 N 15/11; C12 N 15/53; C12 N 15/54; C12 N 15/55; C12 N 15/60; C12 N 15/82; C12 P 7/62; C12 Q 1/68; G01 N 33/50

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Edit](#) | [Delete](#) | [Claims](#) | [KIMC](#) | [Drawn](#) | [Def](#)

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2. Document ID: EP 1006190 A1

L3: Entry 2 of 2

File: DWPI

Jun 7, 2000

DERWENT-ACC-NO: 2000-378264

DERWENT-WEEK: 200035

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TITLE: New polynucleotides encoding enzymes from the biosynthetic pathway for aromatic and/or aliphatic ester production in fruit used to modify plant flavors

INVENTOR: AHARONI, A; LUECKER, J ; O'CONNELL, A P ; VAN TUNEN, A J ; VERHOEVEN, H A

PRIORITY-DATA: 1998EP-0204018 (December 2, 1998)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>EP 1006190 A1</u>	June 7, 2000	E	116	C12N015/53

INT-CL (IPC): A01 H 5/00; C07 K 16/40; C12 N 9/04; C12 N 9/10; C12 N 9/88; C12 N 15/11; C12 N 15/53; C12 N 15/54; C12 N 15/60; C12 N 15/82; C12 P 7/62; C12 Q 1/68; G01 N 33/50

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Terms	Documents
L1 with fruit	2

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**Search Results - Record(s) 1 through 10 of 15 returned.**

1. Document ID: US 20040009576 A1

**Using default format because multiple data bases are involved.**

L1: Entry 1 of 15

File: PGPB

Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040009576

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040009576 A1

TITLE: Methods and compositions for modification of lipid biosynthesis

PUBLICATION-DATE: January 15, 2004

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	COUNTRY	RULE-47
Kalscheuer, Rainer	Munster	CA	DE	
Steinbuchel, Alexander	Altenberge		DE	
Voelker, Toni	Davis		US	

US-CL-CURRENT: 435/252.3

**Full** | **Title** | **Citation** | **Front** | **Review** | **Classification** | **Date** | **Reference** | **Sequences** | **Attachments** | **Claims** | **KM/C** | **Drawn D**

2. Document ID: US 20030191043 A1

L1: Entry 2 of 15

File: PGPB

Oct 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030191043

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030191043 A1

TITLE: Methods and formulations for enhancing the dissolution of a solid material in liquid

PUBLICATION-DATE: October 9, 2003

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	COUNTRY	RULE-47
Becker, Nathaniel T.	Hillsborough	CA	US	
Capeci, Scott William	North Bend	OH	US	
Concar, Edward M.	San Francisco	CA	US	
Janssen, Giselle	San Carlos	CA	US	

## Hit List

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Search Results - Record(s) 11 through 15 of 15 returned.

11. Document ID: JP 02035080 A

Using default format because multiple data bases are involved.

L1: Entry 11 of 15

File: JPAB

Feb 5, 1990

PUB-NO: JP402035080A

DOCUMENT-IDENTIFIER: JP 02035080 A

TITLE: NOVEL ALCOHOL ACYL TRANSFERASE AND USE THEREOF

PUBN-DATE: February 5, 1990

INVENTOR-INFORMATION:

NAME	COUNTRY
YAMAUCHI, HIROTADA	
HASUO, TETSUO	
HARA, MASAMICHI	
YOSHIZAWA, KIYOSHI	
AMACHI, TERUO	

US-CL-CURRENT: 435/193; 435/910

INT-CL (IPC): C12N 9/10; C12G 3/02

Full	Title	Citation	Front	Review	Classification	Date	Reference	Geographical	Priority	Claims	KINIC	Drawn	De
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12. Document ID: EP 1006190 A1

L1: Entry 12 of 15

File: EPAB

Jun 7, 2000

PUB-NO: EP001006190A1

DOCUMENT-IDENTIFIER: EP 1006190 A1

TITLE: Fruit flavour related genes and use thereof

PUBN-DATE: June 7, 2000

INVENTOR-INFORMATION:

NAME	COUNTRY
VERHOEVEN, HARRIE ADRIANUS	NL
VAN, TUNEN ARJEN JOHANNES	NL
AHARONI, ASAPH	IL
LUECKER, JOOST	NL
O'CONNELL, ANN PATRICIA	NL

INT-CL (IPC): C12 N 15/53; C12 N 15/54; C12 N 15/60; C12 N 15/11; C12 N 15/82; C12 N 9/10; C12 N 9/88; C12 N 9/04; C12 P 7/62; C12 Q 1/68; C07 K 16/40; A01 H 5/00; G01 N 33/50  
 EUR-CL (EPC): C12N015/82; C12N009/04, C12N009/10, C12N009/10, C12N009/88, C12N015/82

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13. Document ID: NZ 512208 A, WO 200032789 A1, AU 200015862 A, EP 1135507 A1, BR 9915881 A

L1: Entry 13 of 15

File: DWPI

Dec 19, 2003

DERWENT-ACC-NO: 2000-412335

DERWENT-WEEK: 200404

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TITLE: A new DNA sequence encoding a polypeptide with alcohol acyl transferase activity for producing and regulating aromatic and/or aliphatic ester formation in microorganisms, plant cells or plants

INVENTOR: AHARONI, A; LUECKER, J ; OCONNELL, A P ; VAN TUNEN, A J ; VERHOEVEN, H A ; O'CONNELL, A P ; LUCKER, J

PRIORITY-DATA: 1999EP-0200739 (March 12, 1999), 1998EP-0204018 (December 2, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>NZ 512208 A</u>	December 19, 2003		000	C12N015/53
<u>WO 200032789 A1</u>	June 8, 2000	E	163	C12N015/53
<u>AU 200015862 A</u>	June 19, 2000		000	
<u>EP 1135507 A1</u>	September 26, 2001	E	000	C12N015/53
<u>BR 9915881 A</u>	February 5, 2002		000	C12N015/53

INT-CL (IPC): A01 H 5/00; C07 K 16/40; C12 N 9/04; C12 N 9/10; C12 N 9/18; C12 N 9/88; C12 N 15/11; C12 N 15/53; C12 N 15/54; C12 N 15/55; C12 N 15/60; C12 N 15/82; C12 P 7/62; C12 Q 1/68; G01 N 33/50

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14. Document ID: EP 1006190 A1

L1: Entry 14 of 15

File: DWPI

Jun 7, 2000

DERWENT-ACC-NO: 2000-378264

DERWENT-WEEK: 200035

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TITLE: New polynucleotides encoding enzymes from the biosynthetic pathway for aromatic and/or aliphatic ester production in fruit used to modify plant flavors

INVENTOR: AHARONI, A; LUECKER, J ; O'CONNELL, A P ; VAN TUNEN, A J ; VERHOEVEN, H A

PRIORITY-DATA: 1998EP-0204018 (December 2, 1998)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>EP 1006190 A1</u>	June 7, 2000	E	116	C12N015/53

INT-CL (IPC) : A01 H 5/00; C07 K 16/40; C12 N 9/04; C12 N 9/10; C12 N 9/88; C12 N 15/11; C12 N 15/53; C12 N 15/54; C12 N 15/60; C12 N 15/82; C12 P 7/62; C12 Q 1/68; G01 N 33/50

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Searches](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn](#)

15. Document ID: JP 02035080 A, JP 2833769 B2

L1: Entry 15 of 15

File: DWPI

Feb 5, 1990

DERWENT-ACC-NO: 1990-080631

DERWENT-WEEK: 199903

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TITLE: Alcohol:acyl:transferase - prepd. by culturing microbe belonging to neurospora

PRIORITY-DATA: 1988JP-0082073 (April 2, 1988), 1989JP-0057619 (March 9, 1989)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>JP 02035080 A</u>	February 5, 1990		014	
<u>JP 2833769 B2</u>	December 9, 1998		013	C12N009/10

INT-CL (IPC) : C12G 3/02; C12N 9/10; C12P 7/64; C12R 1/64; C12N 9/10; C12R 1/645

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Searches](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn](#)

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Terms	Documents
alcohol acyl transferase	15

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## WEST Search History

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DATE: Friday, July 09, 2004

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L7	acyl CoA: alcohol acyl transferase with strawberry	0
<input type="checkbox"/>	L6	alcohol acyl transferase and aliphatic	3
<input type="checkbox"/>	L5	alcohol acyl transferase.clm.	0
<input type="checkbox"/>	L4	L1 with mango	0
<input type="checkbox"/>	L3	L1 with fruit	2
<input type="checkbox"/>	L2	L1 with strawberry	0
<input type="checkbox"/>	L1	alcohol acyl transferase	15

END OF SEARCH HISTORY

=> s (alcohol acyl transferase or alcohol dehydrgenase) and (strawberry or fruit flavor)  
L4 6 (ALCOHOL ACYL TRANSFERASE OR ALCOHOL DEHYDRCENASE) AND (STRAWBER  
RY OR FRUIT FLAVOR)

=> dup rem 14  
PROCESSING COMPLETED FOR L4  
L5 3 DUP REM L4 (3 DUPLICATES REMOVED)

=> d 15 1-3 ibib ab

L5 ANSWER 1 OF 3 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 2002247257 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11985619  
TITLE: Molecular and biochemical characteristics of a gene  
encoding an **alcohol acyl-  
transferase** involved in the generation of aroma  
volatile esters during melon ripening.  
AUTHOR: Yahyaoui Fikri E L; Wongs-Aree Chalermchai; Latche Alain;  
Hackett Rachel; Grierson Don; Pech Jean-Claude  
CORPORATE SOURCE: UMR990 -INP/ENSAT-INRA, Castanet-Tolosan, France.  
SOURCE: European journal of biochemistry / FEBS, (2002 May) 269 (9)  
2359-66.  
PUB. COUNTRY: Journal code: 0107600. ISSN: 0014-2956.  
Germany: Germany, Federal Republic of  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: GENBANK-AF468022  
ENTRY MONTH: 200207  
ENTRY DATE: Entered STN: 20020503  
Last Updated on STN: 20020720  
Entered Medline: 20020719

AB Two genes (CM-AAT1 and CM-AAT2) with strong sequence homology (87%  
identity at the protein level) putatively involved in the formation of  
aroma volatile esters have been isolated from Charentais melon fruit.  
They belong to a large and highly divergent family of multifunctional  
plant acyl-transferases and show at most 21% identity to the only other  
fruit acyl-transferase characterized so far in **strawberry**.  
RT-PCR studies indicated that both genes were specifically expressed in  
fruit at increasing rates in the early and mid phases of ripening.  
Expression was severely reduced in ethylene-suppressed antisense ACC  
oxidase (AS) fruit and in wild-type (WT) fruit treated with the ethylene  
antagonist 1-MCP. Cloning of the two genes in yeast revealed that the  
CM-AAT1 protein exhibited **alcohol acyl-  
transferase** activity while no such activity could be detected for  
CM-AAT2 despite the strong homology between the two sequences. CM-AAT1  
was capable of producing esters from a wide range of combinations of  
alcohols and acyl-CoAs. The higher the carbon chain of aliphatic  
alcohols, the higher the activity. Branched alcohols were esterified at  
differential rates depending on the position of the methyl group and the  
nature of the acyl donor. Phenyl and benzoyl alcohols were also good  
substrates, but activity varied with the position and size of the aromatic  
residue. The cis/trans configuration influenced activity either  
positively (2-hexenol) or negatively (3-hexenol). Because ripening melons  
evolve the whole range of esters generated by the recombinant CM-AAT1  
protein, we conclude that CM-AAT1 plays a major role in aroma volatiles  
formation in the melon.

L5 ANSWER 2 OF 3 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
ACCESSION NUMBER: 2000-10767 BIOTECHDS  
TITLE: New polynucleotides encoding enzymes from the biosynthetic  
pathway for aromatic and/or aliphatic ester production in  
fruit used to modify plant flavors;  
vector-mediated alcohol-acyltransferase,  
amino-transferase, thiolase, pyruvate-decarboxylase and

alcohol-dehydrogenase in transgenic plant  
AUTHOR: Verhoeven H A; van Tunen A J; Aharoni A; Luecker J; O'Connell  
A P  
PATENT ASSIGNEE: DLO-Cent.Plant-Breed.Reprod.Res.Wageningen  
LOCATION: Wageningen, The Netherlands.  
PATENT INFO: EP 1006190 7 Jun 2000  
APPLICATION INFO: EP 1998-204018 2 Dec 1998  
PRIORITY INFO: EP 1998-204018 2 Dec 1998  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
OTHER SOURCE: WPI: 2000-378264 [33]

AB A DNA (1,638 or 1,613 bp) encoding a protein (452 or 434 amino acids (aa)) with **alcohol-acyl-transferase** activity which is involved in the biosynthetic pathway for aromatic and aliphatic ester production in fruit is new. Also claimed are: a DNA sequence of 1,586 bp encoding a protein (397 aa) with amino-transferase activity; regulating aromatic/ aliphatic ester production in fruit, microorganisms or plants; a 1,775 bp sequence encoding a protein with thiolase activity; a 2,141 bp sequence encoding a protein (605 aa) with pyruvate-decarboxylase (EC-4.1.1.1) activity; a 1,415, 1,227, 1,064, 1,228, 852, 664, 694 or 1,010 bp encoding a protein (333, 326, 278, 284, 188, 181, 176 or 284 aa) with alcohol-dehydrogenase (EC-1.1.1.1) activity; a vector; a plant (**strawberry** (*Fragaria* sp.)), lemon (*Citrus* sp.), banana (*Musa sapientum*), apple (*Malus* sp.), pear (*Pyrus domestica*), melon (*Cucumis melo*), tomato (*Lycopersicon esculentum*), sweet pepper, peach (*Prunus persica*) or mango (*Mangifera indica*)) containing vector; an antibody; and a kit for screening fruit for volatile aromatic/aliphatic esters. The products can be used for in vitro and in vivo production of bioflavours. (116pp)

L5 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2000:398283 HCAPLUS  
DOCUMENT NUMBER: 133:262234  
TITLE: Identification of the SAAT gene involved in  
**strawberry** flavor biogenesis by use of DNA  
microarrays  
AUTHOR(S): Aharoni, Asaph; Keizer, Leopold C. P.; Bouwmeester,  
Harro J.; Sun, Zhongkui; Alvarez-Huerta, Mayte;  
Verhoeven, Harrie A.; Blaas, Jan; Van Houwelingen,  
Adele M. M. L.; De Vos, Ric C. H.; Van der Voet,  
Hilko; Jansen, Ritsert C.; Guis, Monique; Mol, Jos;  
Davis, Ronald W.; Schena, Mark; Van Tunen, Arjen J.;  
O'Connell, Ann P.  
CORPORATE SOURCE: Business Unit Cell Cybernetics, Plant Research  
International, Wageningen, 6700 AA, Neth.  
SOURCE: Plant Cell (2000), 12(5), 647-661  
CODEN: PLCEEW; ISSN: 1040-4651  
PUBLISHER: American Society of Plant Physiologists  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB **Fruit flavor** is a result of a complex mixt. of numerous compds. The formation of these compds. is closely correlated with the metabolic changes occurring during fruit maturation. Here, we describe the use of DNA microarrays and appropriate statistical analyses to dissect a complex developmental process. In doing so, we have identified a novel **strawberry** alc. acyltransferase (SAAT) gene that plays a crucial role in flavor biogenesis in ripening fruit. Volatile esters are quant. and qual. the most important compds. providing fruity odors. Biochem. evidence for involvement of the SAAT gene in formation of fruity esters is provided by characterizing the recombinant protein expressed in *Escherichia coli*. The SAAT enzyme showed max. activity with aliph. medium-chain alcs., whose corresponding esters are major components of **strawberry** volatiles. The enzyme was capable of utilizing short- and medium-chain, branched, and arom. acyl-CoA mols. as cosubstrates. The results suggest that the formation of volatile

esters in fruit is subject to the availability of acyl-CoA mols. and alc. substrates and is dictated by the temporal expression pattern of the SAAT gene(s) and substrate specificity of the SAAT enzyme(s).

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 13:09:09 ON 09 JUL 2004)

FILE 'MEDLINE, HCPLUS, BIOSIS, BIOTECHDS, EMBASE' ENTERED AT 13:09:53 ON 09 JUL 2004

L1 0 S ACYL COA: ALCOHOL ACYL TRANSFERASE AND STRAWBERRY  
L2 6 S ALCOHOL ACYL TRANSFERASE AND STRAWBERRY  
L3 3 DUP REM L2 (3 DUPLICATES REMOVED)  
L4 6 S (ALCOHOL ACYL TRANSFERASE OR ALCOHOL DEHYDRGENASE) AND (STRA  
L5 3 DUP REM L4 (3 DUPLICATES REMOVED)

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	21.74	21.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.47	-1.47

STN INTERNATIONAL LOGOFF AT 13:14:48 ON 09 JUL 2004

=> s alcohol acyl transferase  
24501 ALCOHOL  
21762 ACYL  
64324 TRANSFERASE  
L1 12 ALCOHOL ACYL TRANSFERASE  
(ALCOHOL (W) ACYL (W) TRANSFERASE)

=> d 11 1-5

L1 ANSWER 1 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 474849-06-4 REGISTRY  
CN DNA (Aspergillus oryzae strain O-1013 alcohol acyltransferase gene  
promoter region-containing fragment) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 34: PN: JP2002320477 SEQID: 34 claimed DNA  
CN DNA (Aspergillus oryzae strain O-1013 AACTase gene promoter  
region-containing fragment)  
FS NUCLEIC ACID SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA CAplus document type: Patent  
RL.P Roles from patents: BIOL (Biological study); PRP (Properties)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 2 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 393040-80-7 REGISTRY  
CN DNA (Cucumis melo strain Vedrantais clone Cm-AT2 gene AT2 alcohol  
acyl-transferase cDNA plus flanks) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN GenBank AF468022  
FS NUCLEIC ACID SEQUENCE  
MF Unspecified  
CI MAN  
SR GenBank  
LC STN Files: CA, CAPLUS, GENBANK  
DT.CA CAplus document type: Journal  
RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 3 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 289611-34-3 REGISTRY  
CN DNA (Fragaria ananassa gene SAAT alcohol acyltransferase cDNA plus  
flanks) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN GenBank AF193789  
FS NUCLEIC ACID SEQUENCE  
MF Unspecified  
CI MAN  
SR GenBank  
LC STN Files: CA, CAPLUS, GENBANK  
DT.CA CAplus document type: Journal  
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP  
(Properties)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 4 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 274708-05-3 REGISTRY  
CN DNA (honeydew melon clone MAY5 alcohol acyltransferase cDNA plus 3'-flank) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 51: PN: WO0032789 SEQID: 23A claimed sequence  
FS NUCLEIC ACID SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA CAplus document type: Patent  
RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
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1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 5 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 274707-95-8 REGISTRY  
CN DNA (apple clone MAY3 alcohol acyltransferase cDNA plus 3'-flank) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 41: PN: WO0032789 SEQID: 18A claimed sequence  
FS NUCLEIC ACID SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA CAplus document type: Patent  
RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

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1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	23.40	23.61

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 JUL 2004 HIGHEST RN 706430-72-0  
DICTIONARY FILE UPDATES: 8 JUL 2004 HIGHEST RN 706430-72-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L1 3 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L2 1 289611-34-3/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL GENBANK

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.50	24.11

FILE 'GENBANK' ENTERED AT 13:17:22 ON 09 JUL 2004

GENBANK (R) IS A REGISTERED TRADEMARK OF THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L2

L3 1 L2

=> DIS L3 1 IDE

THE ESTIMATED COST FOR THIS REQUEST IS 5.92 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L3 ANSWER 1 OF 1 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC) : AF193789 GenBank (R)  
GenBank ACC. NO. (GBN) : AF193789  
GenBank VERSION (VER) : AF193789.1 GI:10121327  
CAS REGISTRY NO. (RN) : 289611-34-3  
SEQUENCE LENGTH (SQL) : 1638  
DEFINITION (DEF) : Fragaria x ananassa alcohol acyltransferase (AAT) mRNA, complete cds.

FEATURES (FEAT) :

Feature Key	Location	Qualifier
-------------	----------	-----------

L3 ANSWER 1 OF 1

GENBANK® COPYRIGHT 2004 on STN

LOCUS (LOC) : AF193789 GenBank (R)  
GenBank ACC. NO. (GBN) : AF193789  
GenBank VERSION (VER) : AF193789.1 GI:10121327  
CAS REGISTRY NO. (RN) : 289611-34-3  
SEQUENCE LENGTH (SQL) : 1638  
DEFINITION (DEF) : Fragaria x ananassa alcohol acyltransferase (AAT) mRNA, complete cds.

FEATURES (FEAT) :

Feature	Key	Location	Qualifier
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gene		1..1638	/gene="AAT"
CDS		16..1374	/gene="AAT" /note="acyltransferase" /codon-start=1 /product="alcohol acyltransferase" /protein-id="AAG13130.1" /db-xref="GI:10121328" /translation="MEKIEVSINSKHTIKPSTSS TPLQPYKLTLLDQLTPPAYVPIF FYPITDHFNLNPQTLADLRQALSETLTLYYPLSG RVKNNLYIDDFEEGPVYLEARVNC DMTDFLRLRKIECLNEFVPIKPFMEAISDERYP LLGVQVNFDGIAIGVSVHKLI DGGTADCFLKSWGAVFRGCRENIIHPSLSEAALL FPPRDDLPEKYVDQMEALWFAGKK VATRRFVFGVKAISSIQDEAKSESVPKPSRVHAV TGFLWKHLIAASRALTSGTTSTRL SIAAQAVNLRTRMNMETVLDNATGNLFWWAQAIL ELSHTTPEISDLKLCDLVNLLNGS VKQCNGDYFETFKGKEGYGRMCEYLDQRTMSSM EPAPDIYLFSWTNNPLDFGWG RTSWIGVAGKIESASCKFIILVPTQCGSGIEAWV NLEEEKMAMLEQDPHFLALASPCT LI"

SEQUENCE (SEQ) :

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181 cctcaaaccc tagctgactt aagacaagcc ctttggaga ctctcacttt gtactatcca  
241 ctctctggaa gggtaaaaaa caacctatac atcgatgatt ttgaagaagg tttccatata  
301 cttgaggctc gaggtaattt tgacatgact gatttctaa ggcttcggaa aatcgagtgc  
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481 tctcacaaggc tcatacgatgg aggaacggca gactgtttt tcaagtccctg ggggtgttgtt  
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1021 aaacaatgta acggtgattt ctttggactt ttcaagggtt aagagggtt tggaaagaatg  
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1321 cttagaacaag atccccattt tctagcgtt gcatctccaa agaccttaat taaaagatata

1381 tgattaagaa agattatgtg gctcgtgcaa tgtttcgatt ttgcagtgaa taaggtttaa  
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1501 ccgaatgtgt ttccatatgc ttgttaaccaa tatagctctt tattgttaaca aatgctctat  
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1621 aaaaaaaaaa aaaaaaaaaa

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                           /db-xref="taxon:3747"
                           /tissue-type="ripe fruit"
gene        1..1638          /gene="AAT"
CDS         16..1374          /gene="AAT"
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                           /product="alcohol acyltransferase"
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TPLQPYKLTLLDQLTPPAYVPIVF
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RVKNNLYIDDFEEGVPYLEARVNC
DMTDFLRLRKIECLNEFVPIKPFMEAISDERYP
LLGVQVNVDGSGIAIGVSVSHKLI
DGGTADCFLKSGAVFRGCRENIIHPSLSEAALL
FPPRDDLPEKYVDQMEALWFAGKK
VATRRFVFGVKAISSIQDEAKSESVPKPSRVHAV
TGFLWKHLIAASRALTSGGTSTRL
SIAAQAVNLRTRMNMETVLDNATGNLFWWAQAIL
ELSHTTPEISDLKLCDLVNLLNGS
VKQCNGDYFETFKGKEGYGRMCEYLDQRTMSSM
EPAPDIYLFSSWTNFFNPLDFGWG
RTSWIGVAGKIESASCKFIILVPTQCGSGIEAWV
NLEEEKMAMLEQDPHFLALASPCT LI"
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SEQUENCE (SEQ) :

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121 cctccggcgt atgtcccat cgtgttctc tacccccatta ctgaccatga cttcaatctt
181 cctcaaacc c tagctgactt aagacaagcc ctttcggaga ctctcaactt gtactatcca
241 ctctctggaa gggtaaaaaa caacctatac atcgatgatt ttgaagaagg tgtcccatac
301 cttgaggcgc gagtgaattt tgacatgact gattttctaa ggcttcggaa aatcgagtgc
361 cttaatgagt ttgttccaaat aaaaccattt agtatggaag caatatctga tgagcgttac
421 cccttgcttg gagttcaagt caacgtttc gattctggaa tagcaatcgg tgtctccgtc
481 tctcacaaggc tcatcgatgg aggaacggca gactgtttc tcaagtccctg gggtgctgtt
541 tttcgagggt gtcgtaaaaa tattttatcat cctagtcctt ctgaaggcgc attgctttc
601 ccacccgagat atgacttgc tgaaaaagtat gtcgatcaga tggaaagcggtt atggtttgc
661 gggaaaaaaag ttgctacaag gagatttggta ttgggtgtga aagccatatc ttcaattcaa
721 gatgaaggcga agagcgagtc cgtccccaaag ccatcaccat ttcatgccgt cactggttt
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841 ctttctatag cggccccaggc agtgaactt agaacacgga tgaacatgg gacagtgttgc
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1081 tgcgagtatc tagattttca gaggactatg agttctatgg aaccacgacc ggtatattat
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1501 ccgaatgtgt ttccatatgc ttgttaaccaa tatagtctt tattgtaca aatgcttat
1561 taagttcttca gctataaagt tatttatcta taaaaataa aactatggaa gttttaccaa
1621 aaaaaaaaaa aaaaaaaaaa
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=> d 11 1-5  
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

RN 474849-06-4 REGISTRY  
CN DNA (Aspergillus oryzae strain O-1013 alcohol acyltransferase gene promoter region-containing fragment) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 34: PN: JP2002320477 SEQID: 34 claimed DNA  
CN DNA (Aspergillus oryzae strain O-1013 AACTase gene promoter region-containing fragment)

FS NUCLEIC ACID SEQUENCE

MF Unspecified

CI MAN

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 2 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 393040-80-7 REGISTRY

CN DNA (Cucumis melo strain Vedrantais clone Cm-AT2 gene AT2 alcohol acyl-transferase cDNA plus flanks) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AF468022

FS NUCLEIC ACID SEQUENCE

MF Unspecified

CI MAN

SR GenBank

LC STN Files: CA, CAPLUS, GENBANK

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 3 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 289611-34-3 REGISTRY

CN DNA (Fragaria ananassa gene SAAT alcohol acyltransferase cDNA plus flanks) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AF193789

FS NUCLEIC ACID SEQUENCE

MF Unspecified

CI MAN

SR GenBank

LC STN Files: CA, CAPLUS, GENBANK

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 4 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN

RN 274708-05-3 REGISTRY

CN DNA (honeydew melon clone MAY5 alcohol acyltransferase cDNA plus 3'-flank) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 51: PN: WO0032789 SEQID: 23A claimed sequence

FS NUCLEIC ACID SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA CAplus document type: Patent  
RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 5 OF 12 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 274707-95-8 REGISTRY  
CN DNA (apple clone MAY3 alcohol acyltransferase cDNA plus 3'-flank) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 41: PN: WO0032789 SEQID: 18A claimed sequence  
FS NUCLEIC ACID SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA CAplus document type: Patent  
RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s alcohol dehydrogenase  
13281 "ALCOHOL"  
102156 "DEHYDROGENASE"  
L4 8014 ALCOHOL DEHYDROGENASE  
("ALCOHOL" (W) "DEHYDROGENASE")

=> d 14 1-2

L4 ANSWER 1 OF 8014 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): CR382138 GenBank (R)  
GenBank ACC. NO. (GBN): CR382138  
GenBank VERSION (VER): CR382138.1 GI:49656035  
CAS REGISTRY NO. (RN): 704828-13-7  
SEQUENCE LENGTH (SQL): 2336804  
MOLECULE TYPE (CI): DNA; linear  
DIVISION CODE (CI): Plants, fungi, algae  
DATE (DATE): 3 Jul 2004  
DEFINITION (DEF): Debaryomyces hansenii chromosome F of strain CBS767 of Debaryomyces hansenii.  
KEYWORDS (ST): genomic DNA  
SOURCE: Debaryomyces hansenii (anamorph: Candida famata)  
ORGANISM (ORGN): Debaryomyces hansenii  
Eukaryota; Fungi; Ascomycota; Saccharomycotina;  
Saccharomycetes; Saccharomycetales; Saccharomycetaceae;  
Debaryomyces

COMMENT:

This sequence is unfinished. The sequence was obtained by Genoscope

and annotated by the Genolevures Consortium.

REFERENCE: 1 (bases 1 to 2336804)  
AUTHOR (AU): Dujon,B.; Sherman,D.; Fischer,G.; Durrens,P.;  
Casaregola,S.; Lafontaine,I.; De Montigny,J.; Marck,C.;  
Neuveglise,C.; Talla,E.; Goffard,N.; Frangeul,L.;  
Aigle,M.; Anthouard,V.; Babour,A.; Barbe,V.; Barnay,S.;  
Blanchin,S.; Beckerich,J.M.; Beyne,E.; Bleykasten,C.;  
Boisrame,A.; Boyer,J.; Cattolico,L.; Confanioleri,F.;  
De Daruvar,A.; Desponts,L.; Fabre,E.; Fairhead,C.;  
Ferry-Dumazet,H.; Groppi,A.; Hantraye,F.; Hennequin,C.;  
Jauniaux,N.; Joyet,P.; Kachouri,R.; Kerrest,A.;  
Koszul,R.; Lemaire,M.; Lesur,I.; Ma,L.; Muller,H.;  
Nicaud,J.M.; Nikolski,M.; Oztas,S.;  
Ozier-Kalogeropoulos,O.; Pellenz,S.; Potier,S.;  
Richard,G.F.; Straub,M.L.; Suleau,A.; Swennen,D.;  
Tekiaia,F.; Wesolowski-Louvel,M.; Westhof,E.; Wirth,B.;  
Zeniou-Meyer,M.; Zivanovic,I.; Bolotin-Fukuhara,M.;  
Thierry,A.; Bouchier,C.; Caudron,B.; Scarpelli,C.;  
Gaillardin,C.; Weissenbach,J.; Souciet,J.L.  
TITLE (TI): Genome evolution in yeasts  
JOURNAL (SO): Nature, 430 (6995), 35-44 (2004)  
REFERENCE:  
AUTHOR (AU): Genoscope.  
TITLE (TI): Direct Submission  
JOURNAL (SO): Submitted (01-JUL-2004) Genoscope - Centre National de  
Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail :  
seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr)

FEATURES (FEAT):

Feature	Key	Location	Qualifier
source		1..2336804	/organism="Debaryomyces hansenii" /mol-type="genomic DNA" /strain="CBS767" /db-xref="taxon:4959" /chromosome="F" /note="Genoscope sequence ID : DEHA0FCHR"

L4 ANSWER 2 OF 8014 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): CR382137 GenBank (R)  
GenBank ACC. NO. (GBN): CR382137  
GenBank VERSION (VER): CR382137.1 GI:49654999  
CAS REGISTRY NO. (RN): 704817-76-5  
SEQUENCE LENGTH (SQL): 2037969  
MOLECULE TYPE (CI): DNA; linear  
DIVISION CODE (CI): Plants, fungi, algae  
DATE (DATE): 3 Jul 2004  
DEFINITION (DEF): Debaryomyces hansenii chromosome E of strain CBS767 of  
Debaryomyces hansenii.  
KEYWORDS (ST): genomic DNA  
SOURCE: Debaryomyces hansenii (anamorph: Candida famata)  
ORGANISM (ORGN): Debaryomyces hansenii  
Eukaryota; Fungi; Ascomycota; Saccharomycotina;  
Saccharomycetes; Saccharomycetales; Saccharomycetaceae;  
Debaryomyces

COMMENT:

This sequence is unfinished. The sequence was obtained by Genoscope  
and annotated by the Genolevures Consortium.

REFERENCE: 1 (bases 1 to 2037969)  
AUTHOR (AU): Dujon,B.; Sherman,D.; Fischer,G.; Durrens,P.;  
Casaregola,S.; Lafontaine,I.; De Montigny,J.; Marck,C.;  
Neuveglise,C.; Talla,E.; Goffard,N.; Frangeul,L.;

Aigle,M.; Anthouard,V.; Babour,A.; Barbe,V.; Barnay,S.;  
Blanchin,S.; Beckerich,J.M.; Beyne,E.; Bleykasten,C.;  
Boisrame,A.; Boyer,J.; Cattolico,L.; Confanioleri,F.;  
De Daruvar,A.; Desponts,L.; Fabre,E.; Fairhead,C.;  
Ferry-Dumazet,H.; Groppi,A.; Hantraye,F.; Hennequin,C.;  
Jauniaux,N.; Joyet,P.; Kachouri,R.; Kerrest,A.;  
Koszul,R.; Lemaire,M.; Lesur,I.; Ma,L.; Muller,H.;  
Nicaud,J.M.; Nikolski,M.; Oztas,S.;  
Ozier-Kalogeropoulos,O.; Pellenz,S.; Potier,S.;  
Richard,G.F.; Straub,M.L.; Suleau,A.; Swennen,D.;  
Tekiaia,F.; Wesolowski-Louvel,M.; Westhof,E.; Wirth,B.;  
Zeniou-Meyer,M.; Zivanovic,I.; Bolotin-Fukuhara,M.;  
Thierry,A.; Bouchier,C.; Caudron,B.; Scarpelli,C.;  
Gaillardin,C.; Weissenbach,J.; Souciet,J.L.

TITLE (TI) :

JOURNAL (SO) :

REFERENCE:

AUTHOR (AU) :

TITLE (TI) :

JOURNAL (SO) :

Genome evolution in yeasts

Nature, 430 (6995), 35-44 (2004)

2 (bases 1 to 2037969)

Genoscope.

Direct Submission

Submitted (01-JUL-2004) Genoscope - Centre National de  
Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail :  
seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr)

FEATURES (FEAT) :

Feature Key	Location	Qualifier
source	1..2037969	/organism="Debaryomyces hansenii" /mol-type="genomic DNA" /strain="CBS767" /db-xref="taxon:4959" /chromosome="E" /note="Genoscope sequence ID : DEHA0ECHR"

=> s alcohol dehydrogenase and strawberry  
13281 "ALCOHOL"  
102156 "DEHYDROGENASE"  
8014 ALCOHOL DEHYDROGENASE  
( "ALCOHOL" (W) "DEHYDROGENASE" )  
4378 STRAWBERRY  
L5 12 ALCOHOL DEHYDROGENASE AND STRAWBERRY

=> d 15 1-5

L5 ANSWER 1 OF 12 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC) : CB934831 GenBank (R)  
GenBank ACC. NO. (GBN) : CB934831  
GenBank VERSION (VER) : CB934831.1 GI:30171083  
CAS REGISTRY NO. (RN) : 510544-26-0  
SEQUENCE LENGTH (SQL) : 802  
MOLECULE TYPE (CI) : mRNA; linear  
DIVISION CODE (CI) : Expressed sequence tag  
DATE (DATE) : 28 Apr 2003  
DEFINITION (DEF) : EST000031 **Strawberry** Uni-zapXR cDNA library  
Fragaria x ananassa cDNA clone cDNA clone FACE\_B39 3'  
similar to cinnamyl **alcohol**  
**dehydrogenase**, mRNA sequence.

KEYWORDS (ST) : EST

SOURCE : Fragaria x ananassa

ORGANISM (ORGN) : Fragaria x ananassa

Eukaryota; Viridiplantae; Streptophyta; Embryophyta;  
Tracheophyta; Spermatophyta; Magnoliophyta;

eudicotyledons; core eudicots; Rosidae; eurosids I;  
Rosales; Rosaceae; Rosoideae; *Fragaria*

NUCLEIC ACID COUNT (NA): 248 a 127 c 178 g 231 t 18 others

COMMENT:

Contact: Aharoni A.

Department of Cell biology

DLO-Centre for Plant Breeding and Reproduction Research (CPRO-DLO)

PO Box 16, NL-6700 AA, Wageningen, The Netherlands

Tel: +31 317 477152

Fax: +31 317 418094

Email: a.aharoni@cpo.dlo.nl

Insert Length: 802 Std Error: 0.00

Seq primer: T7

POLYA=Yes.

REFERENCE: 1 (bases 1 to 802)

AUTHOR (AU): Salentijn,E.M.J.; Aharoni,A.; Schaart,J.G.; Boone,M.J.;  
Krens,F.A.

TITLE (TI): Differential gene expression analysis of  
**strawberry** cultivars that differ in  
fruit-firmness

JOURNAL (SO): *Physiol. Plant.*, (2003) In press

FEATURES (FEAT):

Feature Key	Location	Qualifier
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SEQUENCE (SEQ):

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121 accttaggagc tggatngtt ttggtagcn gtgaccaaga tcaaattgcag gctgccattg  
181 gtaccatgga tgggatcant gacacggtt ttgcacaaca tctttcctg cctttgattg  
241 gtttgtgaa gtnntcatgg aaagcttggt atgggtgtg caccagagaa gcttttgaa  
301 ctgccagttt ttccttnact catggaaaga aagatggtag ctgttagcgg cattgggggt  
361 atgaaggaga cacaagagat gatagattt gcagccaagc acaacattac agcagacatc  
421 gaagtcatac caatcganta cttgaacact gctatggagc gtnntagtc aaagatgttc  
481 agataccgtt ttgtcatnaga cattggaaac acactgaagg ctgctntta aattntgcaa  
541 tccagactgg atcaatgaag aaacaagaac agaaacggag actgatttag tgcataactc  
601 ggtgtgggtt ttcctttag catttttgc tgcgtatc atgataatg atcacatgaa  
661 caactgcctt ctgtgatgtat ttgataataa aagaanacat gaacaatgtat actgccttct  
721 tttgtaatgt ttttactat ataatcattt caaattattt tgctatatct ntaaaaaaaa  
781 aaaaaaaaaaa aaaaaaaaaaa aa

L5 ANSWER 2 OF 12

GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AF320110 GenBank (R)

GenBank ACC. NO. (GBN): AF320110

GenBank VERSION (VER): AF320110.1 GI:13507209

CAS REGISTRY NO. (RN): 329894-59-9

SEQUENCE LENGTH (SQL): 2590

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Plants, fungi, algae

DATE (DATE): 28 Nov 2003

DEFINITION (DEF): *Fragaria x ananassa cinnamyl alcohol dehydrogenase* gene, complete cds.

SOURCE: *Fragaria x ananassa*

ORGANISM (ORGN): *Fragaria x ananassa*

Eukaryota; Viridiplantae; Streptophyta; Embryophyta;  
Tracheophyta; Spermatophyta; Magnoliophyta;  
eudicotyledons; core eudicots; rosids; eurosids I;  
Rosales; Rosaceae; Rosoideae; Fragaria

REFERENCE:  
AUTHOR (AU) : Blanco-Portales,R.; Medina-Escobar,N.; Lopez-Raez,J.A.;  
Gonzalez-Reyes,J.A.; Villalba,J.M.; Moyano,E.;  
Caballero,J.L.; Munoz-Blanco,J.  
TITLE (TI) : Cloning, expression and immunolocalization pattern of a  
cinnamyl alcohol dehydrogenase gene  
from strawberry (Fragaria x ananassa cv.  
Chandler)  
JOURNAL (SO) : J. Exp. Bot., 53 (375), 1723-1734 (2002)  
OTHER SOURCE (OS) : CA 137:307362  
REFERENCE:  
AUTHOR (AU) : Blanco-Portales,R.; Caballero,J.L.; Munoz-Blanco,J.  
TITLE (TI) : Direct Submission  
JOURNAL (SO) : Submitted (08-NOV-2000) Bioquimica y Biologia  
Molecular, Universidad de Cordoba, Edificio C-6. Campus  
Universitario de Rabanales, Cordoba 14071, Spain

FEATURES (FEAT) :

Feature Key	Location	Qualifier
source	1..2590	/organism="Fragaria x ananassa" /mol-type="genomic DNA" /cultivar="Chandler" /db-xref="taxon:3747"
mRNA	join(<641..827, 969..1082,1171..1684, 1781..1934,2025..2423)	/product="cinnamyl alcohol dehydrogenase"
CDS	join(736..827, 969..1082,1171..1684, 1781..1934,2025..2230)	/codon-start=1  /product="cinnamyl alcohol dehydrogenase" /protein-id="AAK28509.1" /db-xref="GI:13507210" /translation="MSIEQEHPNKASGWAARDSS GVLSPFNFSRRETGEKDVMFKVLY CGICHSDHHMVKNEWGFSTYPLVPGHEIVGEVTE VGSKVQKFKVGDRVGVGICVGSCR SCENCTDHLENCPKQILTYGANYYDGTTTYGGC SDIMVAHEHFVVVIPDNLPLDGA PLLCAGITTYSPLRYFGLDKPGMHVGVVGLGLG HVAVKFAKAMGVKVTVISTSPKE EEALKHLGADSFLVSRDQDHMQAAIGTMDGIIDT VSAQHPLPLIGLLKSHGKLVMVG APEKPLELPVFPPLMGRKMVAGSGIGGMETQEM IDFAAKHNITADIEVIPIDYLNTA MERLVKADVRVYRFVIDIGNTLKASS"

SEQUENCE (SEQ) :

1 gtttccaatg gaccaactga aaagagcgaa tgaagttaaa caccataaaa gatttaact  
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121 ctaacttaac cgcctgtgtc gtcgtggta acttttggtt tttcatcagc taaatatcat  
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361 aaggaccatg tacataatcc agaacctact tggatgcata gtcacattcc aacgactcat  
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541 aagtagtcaa gtacgtcacc cagccaaaa tccaaaatct cctccctctc tatataatgc  
601 agttaactcc atcgaagggc ggcgtcactc ttccatataat atctgtctgt ctctcacatt  
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 1201 agggagcaaa gtacaaaat ttaaagtgg agacagagtc ggttgtggat gcattgtgg  
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 1321 actcaattac ggtgccaatt actacgacgg aaccaccacc tatggcggtt gctctgacat  
 1381 tatggtgcc catgaacact tcgtgtacg catcccagac aacttgcctc ttgatggtgc  
 1441 tgcgcgctc ctatgtgcg ggattacaac ctacagcccc ctgagatatt tcggacttga  
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 1861 gtctcatgga aagcttgtt tgggttgtc accagagaag cctcttgcac ttccagttt  
 1921 tcctttaactc atgggtaaagc atgttaacttag agtagtgac tttacctgtc atcttctgt  
 1981 cgcatgttg ggttattaaat atgtttat gttcgtctt acaggaagaa agatggtagc  
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 2221 tagctcttaa attctgcaat ccagactgga tcaatgaaga aacaacgaca gaaactgaga  
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 2341 ataatgatca catgaacaac tgtcttctgt gatgatttaa taataaaaaga atacatgaac  
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 2461 tatctctact ccctactgtt attgcaattt catcaaaaac caaaattaag aactgaaaac  
 2521 ttagatctgg tacaaacaca cgtgaagtt tctaaaatga tggctgactt tcataattaa  
 2581 ctcaaaagggtt

L5 ANSWER 3 OF 12

GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC) : AX025499 GenBank (R)  
 GenBank ACC. NO. (GBN) : AX025499  
 GenBank VERSION (VER) : AX025499.1 GI:10187172  
 CAS REGISTRY NO. (RN) : 390285-03-7  
 SEQUENCE LENGTH (SQL) : 1010  
 MOLECULE TYPE (CI) : DNA; linear  
 DIVISION CODE (CI) : Patent  
 DATE (DATE) : 24 Nov 2000  
 DEFINITION (DEF) : Sequence 25 from Patent WO0032789.  
 SOURCE:  
 ORGANISM (ORGN) : Fragaria x ananassa  
 Eukaryota; Viridiplanteae; Streptophyta; Embryophyta;  
 Tracheophyta; Spermatophyta; Magnoliophyta;  
 eudicotyledons; core eudicots; Rosidae; eurosids I;  
 Rosales; Rosaceae; Rosoideae; Fragaria  
 NUCLEIC ACID COUNT (NA) : 333 a 171 c 237 g 269 t  
 REFERENCE:  
 1  
 AUTHOR (AU) : Aharoni,A.; Verhoeven,H.A.; Luecker,J.; O'Connell,A.P.;  
 Van Tunen,A.J.  
 TITLE (TI) : Fruit flavour related genes and use thereof  
 JOURNAL (SO) : Patent: WO 0032789-A 25 08-JUN-2000; AHARONI ASAPH (IL)  
 ; VERHOEVEN HARRIE ADRIANUS (NL) ; LUECKER JOOST (NL) ;  
 CPRO DLO (NL) ; CONNELL ANN PATRICIA O (NL) ; TUNEN  
 ARJEN JOHANNES VAN (NL)

FEATURES (FEAT) :  
 Feature Key Location Qualifier  
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 source 1..1010 /organism="Fragaria x ananassa"  
 /db-xref="taxon:3747"

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NFLETQFGKLDILVNNAGVVGSVY  
LTADYDPVQTYETARDCLKTNYGLKQVTEALVP  
LLQKSEAARI VNVSSGLGQLRNIG  
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IESKGWPLSISAYIVSKAALNAYT  
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**SEQUENCE (SEQ) :**

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181 tgggttattt catcagctag atgtaacaga gccgactact attggttctt tggcaactt
241 tcttggaaacg caatttggaa agcttgacat attggttaac aatgcaggag tcgttggatc
301 tgtatacctc acagccgact atgatccagt gcaaacatac gagacagcga gggattgttt
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L5 ANSWER 4 OF 12 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC) : AX025497 GenBank (R)  
GenBank ACC. NO. (GBN) : AX025497  
GenBank VERSION (VER) : AX025497.1 GI:10187170  
CAS REGISTRY NO. (RN) : 390285-02-6  
SEQUENCE LENGTH (SQL) : 694  
MOLECULE TYPE (CI) : DNA; linear  
DIVISION CODE (CI) : Patent  
DATE (DATE) : 24 Nov 2000  
DEFINITION (DEF) : Sequence 23 from Patent WO0032789.  
SOURCE : Fragaria x ananassa.  
ORGANISM (ORGN) : Fragaria x ananassa  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta;  
Tracheophyta; Spermatophyta; Magnoliophyta;  
eudicots; core eudicots; Rosidae; eurosids I;  
Rosales; Rosaceae; Rosoideae; Fragaria  
NUCLEIC ACID COUNT (NA) : 224 a 104 c 166 g 200 t  
REFERENCE : 1  
AUTHOR (AU) : Aharoni,A.; Verhoeven,H.A.; Luecker,J.; O'Connell,A.P.  
Van Tunen,A.J.  
TITLE (TI) : Fruit flavour related genes and use thereof  
JOURNAL (SO) : Patent: WO 0032789-A 23 08-JUN-2000; AHARONI ASAPH (IL)  
; VERHOEVEN HARRIE ADRIANUS (NL) ; LUECKER JOOST (NL)  
CPRO DLO (NL) ; CONNELL ANN PATRICIA O (NL) ; TUNEN  
ARJEN JOHANNES VAN (NL)

#### FEATURES (FEAT):

FEATURES (FEAT): Feature Key Location Qualifier

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source      1..694          /organism="Fragaria x ananassa"
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                               /db-xref="GI:10187171"
                               /db-xref="REMTREMBL:CAC09059"
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SEQUENCE (SEQ) :

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L5 ANSWER 5 OF 12

GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC) : AX025495 GenBank (R)  
 GenBank ACC. NO. (GBN) : AX025495  
 GenBank VERSION (VER) : AX025495.1 GI:10187168  
 CAS REGISTRY NO. (RN) : 290202-28-7  
 SEQUENCE LENGTH (SQL) : 663  
 MOLECULE TYPE (CI) : DNA; linear  
 DIVISION CODE (CI) : Patent  
 DATE (DATE) : 24 Nov 2000  
 DEFINITION (DEF) : Sequence 21 from Patent WO0032789.  
 SOURCE: Fragaria x ananassa.  
 ORGANISM (ORGN) : Fragaria x ananassa  
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta;  
 Tracheophyta; Spermatophyta; Magnoliophyta;  
 eudicotyledons; core eudicots; Rosidae; eurosids I;  
 Rosales; Rosaceae; Rosoideae; Fragaria  
 NUCLEIC ACID COUNT (NA) : 203 a 107 c 180 g 173 t  
 REFERENCE:  
 AUTHOR (AU) : Aharoni,A.; Verhoeven,H.A.; Luecker,J.; O'Connell,A.P.;  
 Van Tunen,A.J.  
 TITLE (TI) : Fruit flavour related genes and use thereof  
 JOURNAL (SO) : Patent: WO 0032789-A 21 08-JUN-2000; AHARONI ASAPH (IL)  
 ; VERHOEVEN HARRIE ADRIANUS (NL) ; LUECKER JOOST (NL) ;  
 CPRO DLO (NL) ; CONNELL ANN PATRICIA O (NL) ; TUNEN  
 ARJEN JOHANNES VAN (NL)

FEATURES (FEAT) :

Feature Key	Location	Qualifier
source	1..663	/organism="Fragaria x ananassa" /db-xref="taxon:3747"
CDS	<3..548	/note="partial cDNA Strawberry alcohol dehydrogenase"

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SEQUENCE (SEQ) :

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181 atgccacccca aatgcaagag gctatggact cactggatta cattattgac accattccag  
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661 aaa

STN INTERNATIONAL LOGOFF AT 13:22:17 ON 09 JUL 2004